

ANSWERS TO SOME FREQUENTLY ASKED QUESTIONS

WHAT IS AN OCTANE RATING AND WHY IS IT IMPORTANT?

Octane number is a measure of gasoline's antiknock performance - its ability to resist knocking (a metallic pinging sound) as it burns in a vehicle's engine. When you compare gasoline prices among stations, be careful to compare prices for the same octane. Using high octane gasoline in an engine that is designed for a lower octane is usually not recommended unless your engine knocks. Check your vehicle owner's manual to see which octane the manufacturer recommends.

WHAT ARE "OXYGENATED" AND "REFORMULATE" GASOLINES?

Oxygenated gasoline is conventional gasoline to which chemicals that are rich in oxygen have been added. This increases the octane and/or meets clean air regulations to help reduce carbon monoxide exhaust emissions. Oxygenated gasoline is required during winter months in those metropolitan areas that do not meet the Federal air quality standard for carbon monoxide. The most common oxygenates used are methyl tertiary-butyl ether (MTBE) and ethanol (alcohol). Oxygenated gasoline performs as well as conventional gasoline in most vehicles.

Reformulated gasoline (RFG) is gasoline blended to reduce potentially harmful emissions from vehicles. The Federal Government issues regulations that specify characteristics of the gasoline. Federal RFG is required in those metropolitan areas that do not meet the Federal air quality standard for ozone. If you have questions about the use of oxygenated gasoline (and RFG), in your vehicle, consult the owner's manual.

IMPORTANT FINAL NOTE!

Service station owners are required to keep their dispensers in good working order; however, equipment sometimes fails and mistakes do happen. If you have a problem involving incorrect pricing, short measure, or incorrect octane posting, call your local Weights and Measures Office.

This information was brought to you by:
The National Conference On
Weights and Measures



And the New Hampshire Department of
Agriculture, Markets and Food
Bureau of Weights and Measures



25 Capitol Street, PO Box 2042
Concord, NH 03302-2042

603-271-3700

The National Conference on Weights and
Measures is sponsored by:

United States Department of Commerce
National Institute of Standards and Technology

FUEL FOR THOUGHT



GETTING WHAT
YOU PAY FOR AT THE
GAS STATION

WHAT YOU CAN DO AT THE PUMP

Pricing / Computations

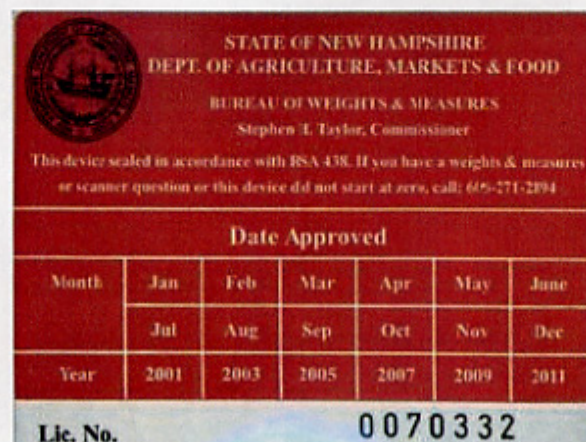
Many factors draw motorists to a gas station, and price is near the top of the list. To be sure that you are being charged the correct amount based on the posted price, do the following:

- ▶ Keep in mind that vehicle tank capacity in the owner's manual is only an estimate. It may hold more or less than the stated capacity.
- ▶ Check the prices posted on station signs that list the grade of gasoline and type of service you select (full, self, cash/credit). Make sure that price is the same as the price per gallon on the dispenser face for the grade, type of fuel, type of service, and method of payment you select. Carefully note any qualifications or conditions required to obtain the discount for the cash/credit price.
- ▶ Make sure that the numbers on the face of the dispenser for SALE and GALLONS are set to ZERO before you begin pumping gas. If the previous sale still appears on the dispenser when you start pumping gas, you can become the victim of an "inflated" purchase.
- ▶ Multiply the indicated gallons delivered by the price per gallon to assure that the dispenser is correctly computing the price. (If you do not have time to do this at the Station, **get a receipt** of write the numbers down and do the math at home.)
- ▶ If you make a credit card purchase, check to be sure you have been charged the correct amount and take your receipt with you.
- ▶ At full-service stations, observe attendants as they fill your tank or add liquids such as oil, transmission fluid, engine coolant to be sure they add the entire product. Ask the price of these products before the attendant opens the containers.

WHAT WEIGHTS AND MEASURES CAN DO

Do You Need More Help? Call your State or local Weights and Measures Officials as soon as possible. They will give your questions and complaints high priority. To protect you, the consumer, they do the following:

- ▶ Require all gasoline dispensers be tested and calibrated on an annual basis by service technicians licensed by the department.
- ▶ Pump gasoline into a certified test measure (a container capable of holding a known quantity) to check for accuracy of the product delivered.
- ▶ Make sure the price computations at the dispenser and the readouts inside the gas station are accurate and agree.
- ▶ Place an approval seal (certification stamp) on the dispenser if, at the time of the test the delivered quantity and pricing are accurate and the dispenser meets all legal requirements.



WHAT YOU CAN DO FOR SAFETY

Pay Careful Attention!

Petroleum products and gasoline are extremely flammable. Static electricity can cause explosions and fires. To protect yourself, use these precautions:

- ▶ Shut off the vehicle's engine before refueling.
- ▶ Do NOT Smoke when pumping gas into your vehicle.
- ▶ To carry small amounts of fuel, use only approved fuel containers, which are readily available at most hardware and retail stores. Do not use plastic or glass containers, which are too fragile and not approved as fuel containers.
- ▶ Place portable fuel containers on the ground while you are filling them with gasoline. This assures grounding of the container and reduces danger of static electric spark.
- ▶ NEVER fill portable containers while they are inside a vehicle. Static electricity may ignite gasoline fumes. Filling an ungrounded container that is placed on the plastic bed liner of a pickup truck creates an extreme hazard.
- ▶ After setting the nozzle to automatic you reenter the vehicle. When product stops flowing you exit the vehicle. Static electricity generated from sliding across the seat exiting the vehicle may ignite gasoline fumes.